NPDES Permit No. IL0000302
Notice No. 7173c

Public Notice Beginning Date: **October 15, 2015**

Public Notice Ending Date: **November 16, 2015**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Renewed and Modified NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water, Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

BC Recovery, LLC
500 Cutler-Trico
Percy, Illinois 62272

Name and Address of Facility:

BC Recovery, LLC
BCR No. 1 Mine
2 miles west of DuQuoin, Illinois
Perry County

The Illinois Environmental Protection Agency (IEPA or Agency) has made a tentative determination to issue an NPDES permit to discharge into waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. Comments will be accepted until midnight of the Public Notice period ending date indicated above, unless a request for an extension of the original comment period is granted by the Agency. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name, address and the nature of the issues raised and the evidence supporting those issues. Commentors may include a request for public hearing. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

As provided in 35 Ill. Adm. Code 309.115(a), any person may submit a request for a public hearing and if such written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. The Agency shall issue public notice of such hearing no less than thirty (30) days prior to the date of such hearing in the manner described by 35 Ill. Adm. Code 309.109 through 309.112 for public notice. The Agency's responses to written and/or oral comments will be provided in the Responsiveness Summary provided when the final permit is issued.

The applicant operates an existing surface coal mine (SIC 1221). Mine operations result in the discharge of alkaline mine drainage.

Public comments are invited on the entire draft permit. The following proposed modifications were incorporated into this Permit renewal:

Revised mining operations plan for 104.6 acres and modification of the coal processing facilities.

Incorporating the transfer of 187.3 acres from OMM Permit No. 46 and 427 acres from OMM Permit No. 174 to Knight Hawk Coal, LLC – Red Hawk Mine.

Incorporating the removal of 731 acres for final bond release.

This facility has one (1) existing discharge which is located in Perry County, Illinois. The following information identifies the discharge points, receiving streams, and stream classifications:

Outfall	Receiving Stream	Latitude (North)	Longitude (West)
002	Panther Creek	37° 59’ 58”	89° 20’ 06”

The stream segment NCE-02 of Panther Creek receiving the discharge from Outfall 002 is not on the 2012 and draft 2014 303(d) list of impaired waters.

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfall: 002

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	2000	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	2500	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.

II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24 hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.

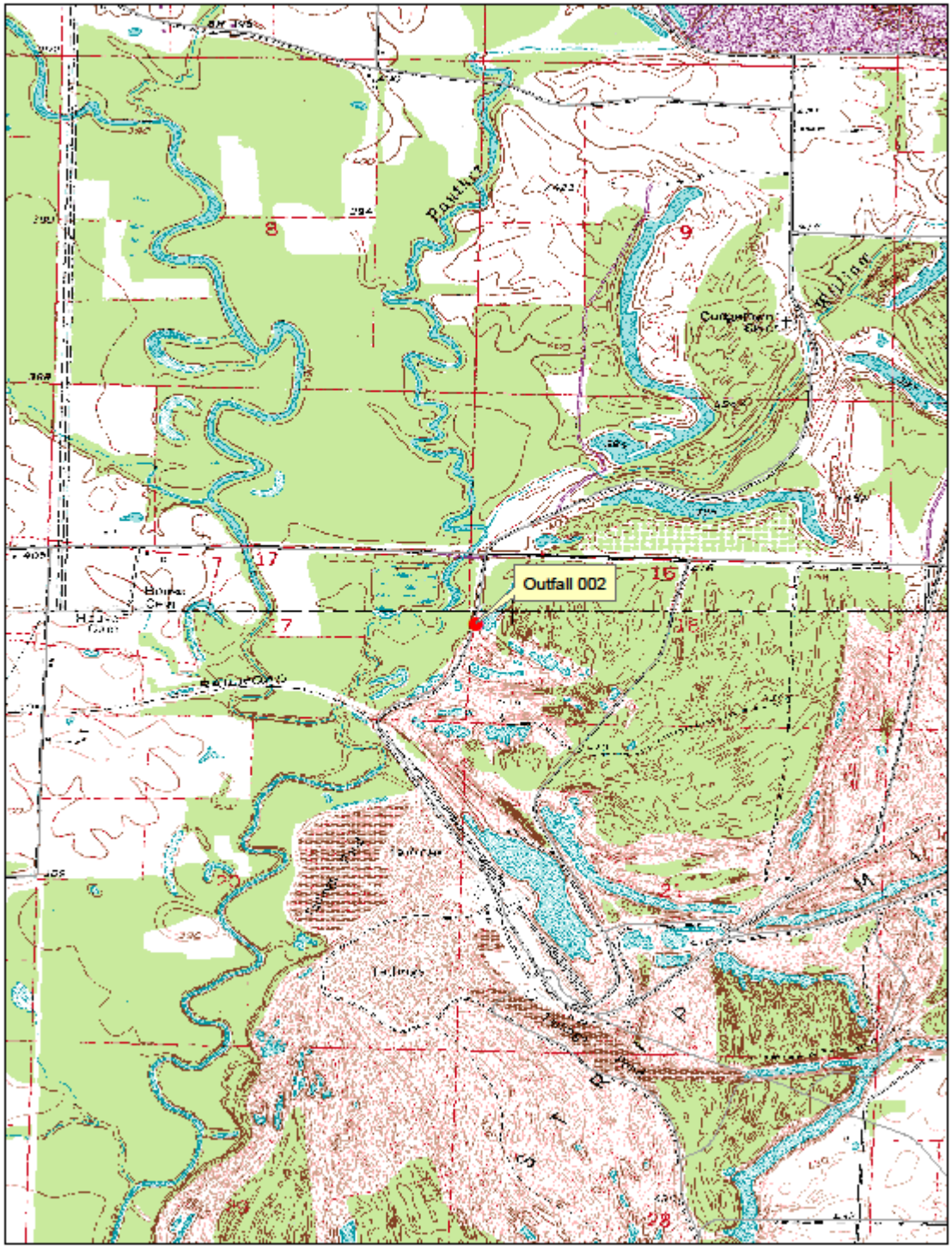
III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

(1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h).
(2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
(3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
(4) Discharges from Outfall 002 are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
(5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

To assist you in identifying the location of the discharges, please refer to the attached map. The permit area for this facility is located in Sections 15, 16, 17, 20, 21, 22, 27, 28, and 29, Township 6 South, Range 2 West, 3rd P.M., Perry County, Illinois.

BC Recovery, L.L.C. - BCR No. 1 Mine
NPDES No. IL0000302
Perry County
Township 6 South, Range 2 West



Antidegradation Assessment
BC Recovery, LLC – BCR No. 1 Mine
NPDES Permit No. IL0000302
Perry County

The Applicant is applying for an Incidental Permit Revision (IPR) for approval of surface mining on 104.6 acres of a former mine site that is currently permitted for surface disturbances only. The BCR No. 1 Mine is the former site of the Fidelity Mine No. 11, which began mining operations in 1929. Fidelity Mine No. 11 was owned and operated by United Electric Coal Company, and later Freeman United Coal Mining Company, before being transferred to Springfield Coal Company, LLC, who conducted reclamation and a concurrent carbon recovery operation at the former surface mine. Unfortunately, Springfield Coal has been unable to acquire the capital necessary to complete reclamation of the slurry impoundments and coal preparation plant site. BC Recovery negotiated an agreement with Springfield Coal to purchase the property, mine the remaining coal, and complete the reclamation. The BCR No. 1 Mine would extract the Herrin No. 6 coal seam utilizing conventional surface mining methods. Surface mining would begin with an initial boxcut in the southeast portion of the site, with mining progressing northwest. Portions of the permit area to be mined include a manmade lake constructed in support of the initial mine. The lake was used as a source of water for coal cleaning and processing and currently exists as a treatment basin, as effluent from Outfall 002 (alkaline mine drainage) travels through this lake prior to discharge. The Applicant would drain the lake and discharge this water through Outfall 002 prior to conducting surface mining in this area. During mining and reclamation operations, surface water runoff and pit pumpage would also be sent to the existing sediment basin and discharge from Outfall 002. The BCR No. 1 mining area contains approximately 64.5 acres of mineable surface reserves. Surface mining the area would recover approximately 728,000 raw tons of coal from the Herrin #6 coal seam, which averages approximately 6.5 feet thick. Overburden above the coal seam averages approximately 49.3 feet thick and would be used to cover and reclaim the adjacent slurry impoundments and the site of the previous coal preparation plant. It is anticipated the mining would be conducted for approximately 4 years, with 2 additional years to complete final reclamation of the site.

Identification and Characterization of the Affected Water Body.

Discharges from Outfall 002 would be received by Panther Creek (Segment NCE-02), a General Use water with zero 7Q10 low flow. The stream has been assessed by the Agency and is found to be fully supportive of aquatic life uses according to the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List. The stream has been given a “D” integrity rating but has not been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The stream is not enhanced in regards to the dissolved oxygen water quality standard.

At the discharge location, Panther Creek flows for approximately 0.25 miles before being received by Beaucoup Creek. Beaucoup Creek (NC-03) is a General Use stream with zero 7Q10 low flow. The stream is listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use (causes = dissolved oxygen and sulfate). It should be noted that the draft 2014 impairment status was based on the results of a 2003 intensive basin survey which found sulfate concentrations to be in excess of the old General Use sulfate water quality standard (500 mg/L). In 2013, this segment of Beaucoup Creek was again surveyed by the Agency and, while still being listed as impaired for aquatic life use in the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List, sulfate is no longer listed as a potential cause of impairment due to the use of new stream data and assessment of this data using the updated sulfate standard. The stream has been given a “B” integrity rating but has not been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The stream is not enhanced in regards to the dissolved oxygen water quality standard.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

Given that the watershed associated with the project area is surrounded by un-reclaimed, pre-law mined land, the current effluent quality of Outfall 002 has elevated concentrations of dissolved constituents, namely sulfate (average = 1,630 mg/L under dry weather discharge conditions) and hardness (average = 1,634 mg/L under dry weather discharge conditions). Chloride, iron and manganese effluent concentrations are attaining water quality standards and are not of concern. Effluent discharged from Outfall 002 is expected to be unchanged from current conditions, with the exception of there being an increase in suspended solids loadings due to surface disturbances, and potentially sulfate and hardness due to exposure of the coal seam and the inclusion of pit pumpage in Outfall 002 effluent. Total suspended solids limits are currently regulated at Outfall 002 in the existing NDPES permit and would continue to be regulated during mining and reclamation activities, which would protect the aquatic life uses of Panther Creek. Sulfate is currently regulated at Outfall 002 with a permit limit of 2,000 mg/L during dry discharge conditions, and 2,500 mg/L during precipitation-driven discharge events which utilizes a small dilution ratio of 1.3:1 (based on the watershed sizes of Outfall 002 and Panther Creek). Sulfate permit limits are predicated by the high hardness concentrations of Outfall 002 effluent, which results in a calculated sulfate water quality standard of 2,000 mg/L. Based on effluent data from Outfall 002 and additional information provided by the Applicant (effluent data from a Red Hawk Mine, an active surface mine nearby), hardness concentrations in Outfall 002 effluent would still result in a calculated sulfate water quality standard of 2,000 mg/L. Retaining the existing sulfate limits during dry discharge and precipitation-driven discharge conditions would be protective of aquatic life and should not impact the aquatic life uses of Panther Creek. Additionally, any temporary increases in suspended solids and sulfate would be offset by the reclamation activities to be performed on-site, which should greatly improve the water quality of effluent from Outfall 002.

Antidegradation Assessment
BC Recovery, LLC – BCR No. 1 Mine
NPDES Permit No. IL0000302
Perry County

Fate and Effect of Parameters Proposed for Increased Loading.

Increased loadings of suspended solids from Outfall 002 would eventually be incorporated into bed sediments and would continue to move downstream. No adverse impacts to Panther Creek or downstream waters are anticipated, as effluent limits for total suspended solids are expected to be attained. Sulfate would remain dissolved in the water column and would move through the downstream continuum. Small amounts would be removed by organisms as these substances are necessary for life. No adverse impacts to Panther Creek or downstream waters would occur, as the sulfate water quality standard is expected to be met in the receiving waters.

Purpose and Social & Economic Benefits of the Proposed Activity.

A comprehensive summary of the social and economic benefits of the coal mine was included in the Applicant's September 9, 2015 document entitled *Assessment of Alternatives for Minimal Environmental Degradation and Economic Benefit Analysis*. The BCR No. 1 Mine would bring in much needed employment to the area and would also provide an economic boost through the procurement of materials, supplies, and services. In addition to the social and economic benefits associated with mining of the project area, reclamation of the area would provide an added environmental and economic benefit. BC Recovery believes they can mine the remaining coal at this site, use the overburden material above the coal to cover adjacent refuse disposal areas, and complete the remaining reclamation liability without the need for the State of Illinois to seek bond forfeiture from Springfield Coal, and without requiring the use of any public tax money to fund the final reclamation. Therefore, the project is also beneficial to Springfield Coal and the taxpayers throughout the State of Illinois.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The use of the existing sediment pond and NPDES permitted outfall for the treatment and discharge surface water runoff and pit pumpage from mining and reclamation activities is the most practical method of minimizing pollutant loading from the proposed project. A comprehensive assessment of alternatives and options to minimize the potential increases in pollutant loading from the project area was conducted by the Applicant and provided in the September 9, 2015 document entitled *Assessment of Alternatives for Minimal Environmental Degradation and Economic Benefit Analysis*. This assessment included consideration of the following alternatives, each of which was considered infeasible or impractical: no mining; no discharge of flows from the site; underground injection; discharge of water to publicly-owned treatment works; and alternative onsite treatment technologies including reverse osmosis, filtration, bioremediation, coagulation, ion exchange, cost effective sulfate removal, supervac, and manganese treatment. It is impractical to further evaluate these alternatives given that pollutant load increases during mining are expected to be minimal and, given that reclamation would be conducted, the project as a whole would serve to minimize pollutant discharges currently leaving the site.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

The IDNR EcoCAT system was consulted on September 2, 2015 in regards to the proposed activities. It was determined that no threatened or endangered species or protected natural areas are in the vicinity of the project area. Consultation was immediately terminated on September 2, 2015 by IDNR.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all existing uses of the receiving stream would be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity would benefit the community at large by providing jobs, boosting the local and regional economy, and providing an added environmental and economic benefit through the reclamation of the abandoned mine site without the need for public tax money. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

NPDES Permit No. IL0000302

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue, East

P.O. Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Renewed and Modified NPDES Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

BC Recovery, LLC
500 Cutler-Trico Road
Percy, Illinois 62272

Facility Name and Address:

BC Recovery, LLC
BCR No. 1 Mine
2 miles west of DuQuoin, Illinois
Perry County

Discharge Number and Classification:

002 Alkaline Mine Drainage

Receiving waters

Panther Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C and/or Subtitle D Rules and Regulations of the Illinois Pollution Control Board, and the Clean Water Act, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Joseph D. Stitely, P.E., Acting Permit Manager
Mine Pollution Control Program
Bureau of Water

JDS:DM:cs/7173c/10-08-15

NPDES Coal Mine Permit

NPDES Permit No. IL0000302

Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall*: 002 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 16	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	2000	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	2500	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.

II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.

III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. In the event that Discharge Conditions II and/or III occur, grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and/or III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). Should a sufficient number of discharge events occur during the quarter, the remaining three (3) quarterly samples may be taken during any of the Discharge Conditions described above.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride in the receiving stream.

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* The Permittee is subject to the limitations, monitoring, and reporting requirements of Special Condition No. 13 for the discharges from Outfall 002 and Panther Creek receiving such discharges. Also, discharges from Outfall 002 shall be subject to the limitations, monitoring, and reporting requirements of Special Condition No. 17.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit

NPDES Permit No. IL0000302

Effluent Limitations and Monitoring

Upon completion of Special Condition 10 and approval from the Agency, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall*: 002 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ***
I	6.5-9.0	2000	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	2000	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	2000	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	2000	500	Monitor only	Measure When Sampling	0.5

I Dry weather discharge (base flow, if present) from the outfall.

II In accordance with 35 Ill. Adm. Code 406.109(b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations. The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.

III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For reclamation area discharges, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

*** One sample per month (1/month) shall be collected if and/or when a discharge occurs under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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* The Permittee is subject to the limitations, monitoring, and reporting requirements of Special Condition No. 14 for the discharges from Outfall 002 and Panther Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit

NPDES Permit No. IL0000302

Effluent Limitations and Monitoring

Upon completion of Special Condition No. 11 and approval from the Agency, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfalls: 002 (Stormwater Discharge)

Parameters	
pH* (S.U.) **	Settleable Solids (ml/l) **
6.0-9.0	0.5

Stormwater discharge monitoring is subject to the following reporting requirements:

Analysis of samples must be submitted with second quarter Discharge Monitoring Reports.

Annual stormwater monitoring is required for all discharges until Final SMCRA Bond is released and approval to cease such monitoring is obtained from the Agency.

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* No discharge is allowed from the above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

** One (1) sample per year shall be collected and analyzed for the indicated parameter; however, such sampling and analysis is required only if and/or when a discharge occurs from the individual Outfall identified above.

NPDES Permit No. IL0000302

Construction Authorization No. 3255-15

Authorization is hereby granted to the above designee to construct and operate the mine and mine refuse area described as follows:

A surface coal mine and concurrent carbon recovery operation containing a total of 2122.7 acres (OMM Permit No. 46), as described and depicted in IEPA Log No. 3255-15 located in Sections 15, 16, 17, 20, 21, 22, 27, 28 and 29, Township 6 South, Range 2 West, Perry County.

The surface facilities at this surface mine and concurrent carbon recovery operation contains a coal crusher, conveyor, coal stockpiles, carbon stockpiles, power distribution facilities, power lines, water lines, maintenance building, slurry impoundment, a sediment pond, and drainage structures.

Surface drainage control is provided by one (1) sedimentation pond with a discharge designated as Outfall 002 classified as alkaline mine drainage.

The location and receiving stream of the Outfall at this facility is as follows:

Outfall Number	Latitude			Longitude			Receiving Water
	DEG	MIN	SEC	DEG	MIN	SEC	
002	37°	59’	58”	89°	20’	06”	Panther Creek

The existing sedimentation pond with designated discharge Outfall 002 receives surface water runoff from disturbed areas and pit pumpage.

Additional details of the acreage that have been removed from the total cited above is as follows:

As described and depicted in IEPA Log No. 4389-14, an area consisting of 187.3 acres located in Sections 22, 26, and 27, Township 6 South, Range 2 West, Perry County is transferred to Knight Hawk Coal, LLC – Red Hawk Mine (OMM Permit No. 436). This area includes previously surface mined areas as well as post-mining permanent impoundments (final cut/incline lake).

IDNR/OMM Permit No. 174 containing 427 acres has been transferred to Knight Hawk Coal, LLC – Red Hawk Mine.

IDNR/OMM Permit Nos. 568-79 and 825-82 containing 667 acres and 64 acres, respectively, have received Final SMCRA Bond release.

As described and depicted in IEPA Log No. 3251-15, Insignificant Permit Revision (IPR) No. 39, the mining operations plan has been revised to allow for surface mining on 104.6 acres. Conventional surface mining methods will be utilized to extract the Herrin No. 6 coal seam. A manmade lake constructed in support of the initial mine will be drained and discharged through a sediment pond associated with Outfall 002, to allow for surface mining. The coal processing facilities identified as the coal crusher, conveyor, hopper, clean coal stockpile and scale will be relocated to aid in the surface mining operation. Suitable material excavated from the mining area will be used to cover and reclaim the adjacent slurry impoundments and the site of the previous coal preparation plant.

Carbon Recovery as proposed in Insignificant Permit Revision No. 12 is approved and subject to Condition No. 12 of this Construction Authorization No. 3255-15.

The abandonment plan shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109.

All water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.202. For the constituents not covered by 35 Ill. Adm. Code 302 or 303, all water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.106.

This Permit is issued subject to the following Condition(s). If such Condition(s) require(s) additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval to secure issuance of a Supplemental Authorization to Construct.

1. If any statement or representation is found to be incorrect, this permit may be revoked and the permittee thereupon waives all rights thereunder.

2. The issuance of this permit (a) shall not be considered as in any manner affecting the title of the premises upon which the mine or mine refuse area is to be located; (b) does not release the permittee from any liability for damage to person or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (c) does not take into consideration the structural stability of any units or parts of the project; and (d) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or with applicable local laws, regulations or ordinances.

3. Final plans, specifications, application and supporting documents as submitted by the person indicated on Page 1 as approved shall constitute part of this permit in the records of the Illinois Environmental Protection Agency.

4. There shall be no deviations from the approved plans and specifications unless revised plans, specifications and application shall first have been submitted to the Illinois Environmental Protection Agency and a supplemental permit issued.

5. The permit holder shall notify the Environmental Protection Agency (217/782-3637) immediately of an emergency at the mine or mine refuse area which causes or threatens to cause a sudden discharge of contaminants into the waters of Illinois and shall immediately undertake necessary corrective measures as required by 35 Ill. Adm. Code 405.111. (217/782-3637 for calls between the hours of 5:00 p.m. to 8:30 a.m. and on weekends.)

6. The termination of an NPDES discharge monitoring point or cessation of monitoring of an NPDES discharge is not authorized by this Agency until the permittee submits adequate justification to show what alternate treatment is provided or that untreated drainage will meet applicable effluent and water quality standards.

7. Initial construction activities in areas to be disturbed shall be for collection and treatment facilities only. Prior to the start of other activities, surface drainage controls shall be constructed and operated to avoid violations of the Act or Subtitle D. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed, for the parameters designated as 1M through 15M under Part 5-C of Form 2C and the effluent parameters designated herein with the results sent to this Agency. Should additional treatment be necessary to meet the standards of 35 Ill. Adm. Code 406.106 or applicable water quality standards, a Supplemental Permit must be obtained. Discharge from ponds is not allowed unless applicable effluent and water quality standards are met in the basin discharge(s).

8. This Agency must be informed in writing and an application submitted if drainage, which was previously classified as alkaline (pH greater than 6.0), becomes acid (pH less than 6.0) or ferruginous (base flow with an iron concentration greater than 10 mg/l). The type of drainage reporting to the basin should be reclassified in a manner consistent with the applicable provisions of 35 Ill. Adm. Code Part 406. The application should discuss the treatment method and demonstrate how the discharge will meet the applicable standards.

9. A permittee has the obligation to add a settling aid if necessary to meet the suspended solids or settleable solids effluent standards. The selection of a settling aid and the application practice shall be in accordance with a. or b. below

    a. Alum ($Al_2(SO_4)_3$), hydrated lime ($Ca(OH)_2$), soda ash (Na_2CO_3), alkaline pit pumpage, acetylene production by-product (tested for impurities), and ground limestone are acceptable settling aids and are hereby permitted for alkaline mine drainage sedimentation ponds.

    b. Any other settling aids such as commercial flocculents and coagulants are permitted only on prior approval from the Agency. To obtain approval a permittee must demonstrate in writing to the Agency that such use will not cause a violation of the toxic substances standard of 35 Ill. Adm. Code 302.210 or of the appropriate effluent and water quality standards of 35 Ill. Adm. Code parts 302, 304, and 406.

10. A general plan for the nature and disposition of all liquids used to drill boreholes shall be filed with this Agency prior to any such operation. This plan should be filed at such time that the operator becomes aware of the need to drill unless the plan of operation was contained in a previously approved application.

11. Any of the following shall be a violation of the provisions required under 35 Ill. Adm. Code 406.202:

    a. It is demonstrated that an adverse effect on the environment in and around the receiving stream has occurred or is likely to occur.

    b. It is demonstrated that the discharge has adversely affected or is likely to adversely affect any public water supply.

    c. The Agency determines that the permittee is not utilizing Good Mining Practices in accordance with 35 Ill. Adm. Code 406.204 which are fully described in detail in Sections 406.205, 406.206, 406.207 and 406.208 in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese. To the extent practical, such Good Mining Practices shall be implemented to:

        i. Stop or minimize water from coming into contact with disturbed areas through the use of diversions and/or runoff controls (Section 406.205).

ii. Retention and control within the site of waters exposed to disturbed materials utilizing erosion controls, sedimentation controls, water reuse or recirculation, minimization of exposure to disturbed materials, etc. (Section 406.206).

iii. Control and treatment of waters discharged from the site by regulation of flow of discharges and/or routing of discharges to more suitable discharge locations (Section 406.207).

iv. Utilized unconventional practices to prevent the production or discharge of waters containing elevated contaminant concentrations such as diversion of groundwater prior to entry into a surface or underground mine, dewatering practices to remove clean water prior to contacting disturbed materials and/or any additional practices demonstrated to be effective in reducing contaminant levels in discharges (Section 406.208).

12. All groundwater monitoring reports required by OMM for the carbon recovery area shall be submitted to the Agency. Sufficient material will be left to maintain the integrity of the bottom of the impoundment.

NPDES Permit No. IL0000302

Special Conditions

Special Condition No. 1: No effluent from any mine related facility area under this permit shall, alone or in combination with other sources, cause a violation of any applicable water quality standard as set out in the Illinois Pollution Control Board Rules and Regulations, Subtitle C: Water Pollution.

Special Condition No. 2: Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

Special Condition No. 3: All periodic monitoring and reporting forms, including Discharge Monitoring Report (DMR) forms, shall be submitted to the Agency according to the schedule outlined in Special Condition No. 4 or 5 below with one (1) copy forwarded to each of the following addresses:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Ave., East
P.O. Box 19276
Springfield, IL 62794-9276

Attn: Compliance Assurance Section

Illinois Environmental Protection Agency
Mine Pollution Control Program
2309 West Main Street, Suite 116
Marion, Illinois 62959

The Permittee may choose to submit electronic DMRs (NetDMR) instead of submitting paper DMRs. Information, including registration information for the NetDMR program can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

Should electronic filing (NetDMR) be elected for DMR monitoring and reporting requirements, a written notification shall be submitted to the Mine Pollution Control Program at the Marion, Illinois address indicated above that such electronic monitoring has been elected providing an indication of the date and/or quarter in which this electronic filing will be initiated.

Special Condition No. 4: Completed Discharge Monitoring Report (DMR) forms and as well as upstream and downstream monitoring results, shall be retained by the Permittee for a period of three (3) months and shall be mailed and received by the IEPA at the addresses indicated in Special Condition No. 3 above in accordance with the following schedule, unless otherwise specified by the permitting authority.

Period	Received by IEPA
January, February, March	April 15
April, May, June	July 15
July, August, September	October 15
October, November, December	January 15

The Permittee shall record discharge monitoring results on Discharge Monitoring Report (DMR) forms using one such form for each Outfall and Discharge Condition each month. In the event that an Outfall does not discharge during a monthly reporting period or under a given Discharge Condition, the DMR form shall be submitted with "No Discharge" indicated.

In the event that electronic filing is being utilized, any and all monitoring results, other than NPDES outfall discharge results reported through NetDMR, shall be submitted to the Agency at the addresses indicated in Special Condition No. 3 above.

Special Condition No. 5: Completed periodic monitoring and reporting, other than DMR's and stream monitoring (i.e., groundwater monitoring, coal combustion waste analysis reports, etc.), shall be retained by the Permittee for a period of three (3) months and shall be mailed and received by the IEPA at the addresses indicated in Special Condition No. 3 above in accordance with the following schedule, unless otherwise specified by the permitting authority.

Period	Received by IEPA
January, February, March	May 1
April, May, June	August 1
July, August, September	November 1
October, November, December	February 1

Special Condition No. 6: The Agency may revise or modify the permit consistent with applicable laws, regulations or judicial orders.

Special Condition No. 7: If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

NPDES Permit No. IL0000302

Special Conditions

Special Condition No. 8: The permittee shall notify the Agency in writing by certified mail within thirty days of abandonment, cessation, or suspension of active mining for thirty days or more unless caused by a labor dispute. During cessation or suspension of active mining, whether caused by a labor dispute or not, the permittee shall provide whatever interim impoundment, drainage diversion, and wastewater treatment is necessary to avoid violations of the Act or Subtitle D.

Special Condition No. 9: Plans must be submitted to and approved by this Agency prior to construction of a sedimentation pond. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed for the parameters designated as 1M-15M under Part 5-C of Form 2C and the effluent parameters designated herein with the results sent to this Agency. Should additional treatment be necessary to meet these standards, a Supplemental Permit must also be obtained. Discharge from a pond is not allowed unless applicable effluent and water quality standards are met.

Special Condition No. 10: The special reclamation area effluent standards of 35 Ill. Adm. Code 406.109 apply only on approval from the Agency. To obtain approval, a request form and supporting documentation shall be submitted to request the discharge be classified as a reclamation area discharge. The Agency will notify the permittee upon approval of the change.

Special Condition No. 11: The special stormwater effluent standards apply only on approval from the Agency. To obtain approval, a request with supporting documentation shall be submitted to request the discharge to be classified as a stormwater discharge. The documentation supporting the request shall include analysis results indicating the discharge will consistently comply with reclamation area discharge effluent standards. The Agency will notify the permittee upon approval of the change.

Special Condition No. 12: Annual stormwater monitoring is required for all discharges not reporting to a sediment basin until Final SMCRA Bond is released and approval to cease such monitoring is obtained from the Agency.

A. Each discharge must be monitored for pH and settleable solids annually.

B. Analysis of samples must be submitted with second quarter Discharge Monitoring Reports. A map with discharge locations must be included in this submittal.

C. If discharges can be shown to be similar, a plan may be submitted by November 1 of each year preceding sampling to propose grouping of similar discharges and/or update previously submitted groupings. If updating of a previously submitted plan is not necessary, a written notification to the Agency indicating such is required. Upon approval from the Agency, one representative sample for each group may be submitted.

Special Condition No. 13: Sediment Pond Operation and Maintenance (Outfall 002):

a. No discharge is allowed from Outfall No. 002 during "low flow" or "no flow" conditions in the receiving stream, unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302. For purposes of this Special Condition "low flow" shall be defined as any condition wherein the upstream flow available for mixing is less than the ratio times the flow rate being discharged from the respective outfall. These ratios are as follows:

Outfall No.	Flow Ratio of Receiving Stream to Outfall Discharge
002	1.31:1

Pursuant to 35 Ill. Adm. Code Part 302.102, discharges from the referenced outfalls that otherwise would not meet the water quality standards of 35 Ill. Adm. Code Part 302 may be permitted if sufficient flow exists in the receiving stream to ensure that applicable water quality standards are met. That is, discharges not meeting the water quality standards of 35 Ill. Adm. Code Part 302 may only be discharged in combination with stormwater discharges from the basin, and only at such times that sufficient flow exists in the receiving stream to ensure that water quality standards in the receiving stream beyond the area of allowed mixing will not be exceeded. Following any such stormwater discharge, but prior to the flow in the receiving stream subsiding, the impounded water in the basin may be pumped or otherwise evacuated sufficiently below the discharge elevation to provide capacity for holding a sufficient volume of mine pumpage and/or surface runoff to preclude the possibility of discharge until such time that a subsequent precipitation event results in discharge from the basin. Should the Permittee elect to pump impounded water from the basin in accordance with this Special Condition, the pump intake shall be "floated" near the impounded water surface or otherwise managed to prevent re-suspension and subsequent discharge of previously accumulated sediments. At times of stormwater discharge, in addition to the alternate effluent (Discharge Condition Nos. II and III) monitoring requirements, as indicated on the applicable effluent pages of this Permit, discharges from Outfall No. 002 shall be monitored and reported for Discharge Rate, Sulfate, Chloride and Hardness.

b. The following sampling and monitoring requirements are applicable to flow in Panther Creek which receives the discharges from Outfall 002.

i. All sampling and monitoring required under 13(b)(ii) and (iii) below shall be performed during a discharge and monitoring event from the associated outfall.

ii. Panther Creek shall be monitored and reported quarterly for Discharge Rate, Sulfate, Chloride and Hardness downstream of the associated outfall. This downstream monitoring shall be performed a sufficient distance downstream of the associated outfall to ensure that complete mixing has occurred. At such time that sufficient information has been collected regarding stream flow characteristics and in-stream contaminant concentrations, the permittee may request a re-evaluation of the monitoring frequency required herein for possible reduction or elimination. For the purpose of re-evaluating the downstream monitoring frequency of the receiving stream, "sufficient information" is defined as a minimum of ten (10) quarterly sampling events.

In the event that downstream monitoring of the receiving waters is eliminated during the term of this permit based on an evaluation of the quarterly data, a minimum of three (3) additional samples analyzed for the parameters identified above must be submitted with the permit renewal application a minimum of 180 days prior to expiration of this permit.

iii. Panther Creek shall be monitored and reported annually for Discharge Rate, Sulfate, Chloride and Hardness upstream of the associated outfall.

Special Condition No. 14: Sediment Pond Operation and Maintenance (Outfall 002 - Reclamation):

a. For discharges resulting from precipitation events, in addition to the alternate effluent (Discharge Condition Nos. II and III) monitoring requirements, as indicated on the applicable effluent pages of this Permit, discharges from Outfall 002 shall be monitored and reported for Discharge Rate, Sulfate, Chloride and Hardness.

b. The following sampling and monitoring requirements are applicable to flow in the Panther Creek which receive discharges from Outfall 002.

i. All sampling and monitoring required under 14(b)(ii) and (iii) below shall be performed during a discharge and monitoring event from the associated outfall.

ii. Panther Creek shall be monitored and reported quarterly for Discharge Rate, Chloride, Sulfate and Hardness downstream of the associated outfall. This downstream monitoring shall be performed a sufficient distance downstream of the associated outfall to ensure that complete mixing has occurred. At such time that sufficient information has been collected regarding receiving stream flow characteristics and in-stream contaminant concentrations the permittee may request a re-evaluation of the monitoring frequency required herein for possible reduction or elimination. For the purpose of re-evaluating the downstream monitoring frequency of the receiving stream, "sufficient information" is defined as a minimum of ten (10) quarterly sampling events.

In the event that downstream monitoring of the receiving waters is eliminated during the term of this permit based on an evaluation of the quarterly data, a minimum of three (3) additional samples analyzed for the parameters identified above must be submitted with the permit renewal application a minimum of 180 days prior to expiration of this permit.

iii. Panther Creek shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.

Special Condition No. 15: Data collected in accordance with Special Condition No. 13 and 14 above will be utilized to evaluate the appropriateness of the effluent limits established in this Permit. Should the Agency's evaluation of this data indicate revised effluent limits are warranted; this permit may be reopened and modified to incorporate more appropriate effluent limitations. This data will also be used for determination of effluent limitations at the time of permit renewal.

Special Condition No. 16: Mercury shall be monitored quarterly until a minimum of ten (10) samples have been collected. This Mercury monitoring is required only under Discharge Condition Nos. I and/or IV and only during quarters in which there are discharges from the outfall which occur under Discharge Condition Nos. I and/or IV. Samples shall be collected and tested in accordance with USEPA 1631E using the option at Section 11.1.1.2 requiring the heating of samples at 50°C for 6 hours in a BrCl solution in closed vessels. This test method has a Method Detection Limit (MDL) of 0.5 ng/l (nanograms/liter). The results of such testing must be reported in "ng/l" (nanograms/liter)and submitted with the quarterly Discharge Monitoring Reports (DMRs). The Permittee may submit a written request to the Agency to discontinue quarterly Mercury monitoring if the sampling results show no reasonable potential to exceed the Mercury water quality standard.

Special Conditions

Special Condition No. 17: Discharges from Outfall No. 002 shall be monitored twice annually with such monitoring spaced at approximately 6-month intervals during the entire 5-year term of this NPDES Permit. Sampling of the discharges shall be performed utilizing the grab sampling method and analyzed for total (unfiltered) concentrations. The results of the sampling required under this Special Condition shall be submitted twice annually to the Agency in January and July of each calendar year to the addresses indicated in the Special Condition No. 2 above. The parameters to be sampled and the detection limits (minimum reported limits) are as follows:

Parameter	Detection Limit
Arsenic	0.05 mg/l
Barium	0.50 mg/l
Cadmium	0.001 mg/l
Chromium (hexavalent)	0.01 mg/l
Chromium	0.05 mg/l
Copper	0.005 mg/l
Lead	0.05 mg/l
Manganese	0.50 mg/l
Mercury*	1.00 ng/l**
Nickel	0.005 mg/l
Phenols	0.005 mg/l
Selenium	2.000 µg/l***
Silver	0.003 mg/l
Zinc	0.025 mg/l

* Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.
** 1.00 ng/l (nanogram/liter) = 1 part per trillion.
*** µg/l = micrograms/liter